

Superfund Records Center
SITE: Olin Chemical
BREAK: 2-3
OTHER: 484703

EPA Official Record

Notes ID: 9E35A77DC5D45DA08525788000731B91

From: "Heather Ford" <HFord@nobiseng.com>

To: Jim Dilorenzo/R1/USEPA/US@EPA

Delivered Date: 10/07/2010 03:39 PM EDT

Subject: Private Well at :

Good afternoon Jim - as you requested in the original email thread below, we have reviewed the attached data package for for Chromium. Our comments on the material are shown below:

Olin

Chromium Private Drinking Water Well Data

Sampled 3/30/10 and 7/29/10

Observations from review of DV Memos and Data provided in 10/5/10 Email

Sample OC-M2L7

3/30/10 sampling exhibited a detected result of 10 ug/L [with a reporting limit (RL) of 5 ug/L].

7/29/10 sampling exhibited a non-detected result [with a RL of 10 ug/L (i.e., reported as 10 U)].

The higher RL during the July analytical testing is likely the cause of the apparent discrepancy in the results. The RL used in July (10 ug/L) is equal to the March detected result. Therefore, if the true July value is the same as the March reported concentration or slightly below between 5 and 10 ug/L, then because they are not reporting below the RL of 10 ug/L, the result is reported as 10 U. If the RL in July matched the RL for March (5 ug/L), concentrations in the 5 to 10 ug/l range would be reported as detects.

In looking at the Final QAPP, the Project Quantitation Limit for GW for Chromium is supposed to be 5 ug/L. We should ask the laboratory to revise the RL for the July event to 5 ug/L for this sample. This revision is possible because the RL is not necessarily the same as the method detection limit, which may be lower. It is possible the March sampling round reported to the method detection limit.

Note that even if the RL is changed to 5 ug/L, there still may not be a detection. Detections at or near the reporting limits can be variable.

There were no DV issues noted with the March 2010 data except a low bias with



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matrix QC for Calcium. This would not affect the Chromium data.

There were no DV issues noted with the July 2010 data.

Let me know if you have any questions.

HMF

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-----Original Message-----

From: dilorenzo.jim@epamail.epa.gov [mailto:dilorenzo.jim@epamail.epa.gov]
Sent: Wednesday, October 06, 2010 9:24 AM
To: Heather Ford
Subject: Re: FW: Private Wells at

Hi Heather -

Yes, I noticed that. MACTEC had also sent a pdf file that showed the risk calculation via for different scenarios, including the birth to age 70 (which is the scenario EPA acknowledges). I had Rick look at the pdf, and he had asked for the Excel spreadsheet, which is what I forwarded to you. The pdf file is attached. Rick and I had discussed the 1.2E-04 estimate. His position is that this is still within the acceptable risk range because EPA rounds total lifetime risk estimates (up or down as appropriate) due to the large uncertainty. So EPA will not recommend any restriction on well use at this time, and will recommend continued re-sampling. Also, in reality, this homeowner's well is shut down 6 months per year because they go to florida, so our estimate is truly conservative.

I also plan to discuss this situation with the emergency response branch since I think they deal with this scenario more often than the remedial program.

More to come...

Jim

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(See attached file: TABLES1thru4_Oct 2010.pdf)

Jim DiLorenzo
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| From: |
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|"Heather Ford"
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| To: |
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|Jim
Dilorenzo/R1/USEPA/US@EPA

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|----->
| Date: |
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|10/05/2010 08:07
PM

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| Subject: |
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|FW: Private Wells at

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Hi Jim -

I asked Cindy to look at the risk calculations and she recalculated them as the calculations did not consider the childhood years. The calculations only addressed 70 years as an adult (assumed to be 20 to 90 years??) without any childhood considerations. She recalculated the risks based on 0 to 70 years with the 31 ng/L NDMA. The childhood years are more sensitive. See the attached recalculation. Note that the risks from NDMA alone are $1.2E-4$.

Heather

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-----Original Message-----

From: dilorenzo.jim@epamail.epa.gov [
mailto:dilorenzo.jim@epamail.epa.gov]
Sent: Tuesday, October 05, 2010 9:52 AM
To: Heather Ford; Sugatt.Rick@epamail.epa.gov
Cc: Joseph.Coyne@state.ma.us
Subject: Private Wells at

is owned by and located on the far end of
This well had elevated concentrations of bis- and total chromium when sampled in March. Nobis ran risk calculations which showed no problem with the bis- or total chromium, but an increased risk if all chromium is assumed to be hexavalent. Olin re-sampled this well in July, and the bis- was much lower and chromium was non-detect.

is owned by and has had a history of NDMA detections since the RI sampling began in the fall of 2008. This home owner is difficult to contact. Olin gained access in August. The results were just reported to me yesterday at 31ppt for NDMA. Olin estimated the total excess cancer risk at $1E-04$ (which is at the upper end of EPA's acceptable risk range.)

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Olin just re-sampled both of these wells. A full private well round will occur during the week of October 11th.

Please review both of the attached data packages and the risk calculation for . I am most interested in learning if there is any explanation for the change in chromium concentrations at ; and if the calcs for are under-estimated in any way (i.e., are the parameters sufficiently conservative?).

Please get back to me by this Friday if you can.

Thanks,
Jim

(See attached file: _70 yr NDMA risk ingPRG-private
well August20101.xls) (See attached file: Memo-JULY-2010
Res Well data val report.pdf) (See attached file: _Memo-JULY
AUGUST-10 Res Well data val report.pdf)

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phone 617.918.1247
fax 617.918.0247[attachment "70 yr risk -private well .xls"
deleted by Jim Dilorenzo/R1/USEPA/US]

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